

ABSTRACT OF THE DISCLOSURE

A method and apparatus for analyzing a hydraulic pump in real-time. A pressure signal is provided representing a discharge pressure of the hydraulic pump, and the pressure signal is decomposed into a plurality of
5 levels. Each of the plurality of levels has at least one frequency band. A feature pressure signal is located in at least one of the frequency bands and compared to a reference wavelet to determine if a fault exists in the hydraulic pump and/or a type of defect in the hydraulic pump.